

WHAT IS CLAIMED IS:

1. A sealing structure for a fishing reel, comprising:
  - a first member having a spindle-formed portion;
  - 5 a second member having an inner peripheral surface disposed about an outer peripheral surface of said spindle-formed portion, said second member being rotatable relative to said first member; and
  - a seal member for sealing a clearance between said spindle-formed portion of said first member and said second member, and having
    - 10 a cylindrical portion made of an elastic substance and mountable on said spindle-formed portion of said first member, and
    - a sealing portion formed integrally on an outer circumferential surface of said cylindrical portion and tapering toward said inner peripheral surface of said second member such that a distal
    - 15 edge of said sealing portion can contact said second member.
2. The sealing structure for a fishing reel set forth in claim 1, wherein said spindle-formed portion of said first member has an annular groove formed in said outer circumferential surface opposing said second member, and
  - 20 said cylindrical portion is fitted into said annular groove.
3. The sealing structure for a fishing reel set forth in claim 1, wherein said sealing portion includes a lip portion that can contact said second member, said lip portion extending outward from and being inclined relative to said spindle-
- 25 formed portion of said first member.
4. The sealing structure for a fishing reel set forth in claim 1, wherein:
  - the fishing reel is a lever-drag-type dual-bearing reel having a lever-drag mechanism and a line-winding spool,
  - 30 said first member is a stationary component of the lever-drag mechanism in the fishing reel, said stationary component being immovable in an axial direction of the spool; and

said second member is a movable component of the lever-drag mechanism, said movable component being rotatable relative to said first member and shiftable in the axial direction of the spool.

5           5.       The sealing structure for a fishing reel set forth in claim 4, wherein said first member is a drag disk capable of braking the spool, and rotates linked to a spool shaft passing through a center of the spool, and  
              said second member is a cover member for covering said drag disk, and rotates linked to the spool and meanwhile shifts in the axial direction together with the spool  
10       and the spool shaft.

              6.       The sealing structure for a fishing reel set forth in claim 5, wherein said drag disk has a boss portion passing centrally through said cover member, said seal member is fitted to said boss portion, and  
15       said cover member has a contact face and a relief face formed on said inner peripheral surface thereof, said contact face and said relief face being arranged next to each other in the axial direction of the spool, said seal member being able to contact said contact face but not being able to contact said relief face.

20           7.       The sealing structure for a fishing reel set forth in claim 6, wherein said sealing portion of said sealing member parts away from said contact face of said cover member and opposes said relief face when said drag disk in its brake-release state parts away from the spool; and comes into contact with said contact face when said drag disk in its braking state contacts the spool.

25           8.       The sealing structure for a fishing reel set forth in claim 4, wherein the spool has a bobbin-trunk portion and flange portions arranged on either end of said bobbin-trunk portion, and  
              a size of said sealing portion in its outer diameter is 8% or more and 50% or  
30       less of an outer diameter of said flange portions.

              9.       The sealing structure for a fishing reel set forth in claim 1, wherein

said first member is a handle spindle fitted detachably and reattachably to a spinning-reel master-gear shaft, and

said second member is a reel body rotatively carrying the master-gear shaft.

5           10.     A sealing structure for a fishing reel, comprising:

          a first member having a spindle-formed portion;

          a second member having an inner peripheral surface disposed about an outer peripheral surface of said spindle-formed portion of said first member, said second member being rotatable relative to said first member; and

10           a seal member for sealing a clearance between said spindle-formed portion of said first member and said second member, and having

          a cylindrical portion made of an elastic substance mountable on said second member, and

15           a sealing portion formed integrally on an inner circumferential surface of said cylindrical portion and tapering toward said outer circumferential surface of said spindle-formed portion of said first member, such that a distal edge of said sealing portion can contact said spindle-formed portion of said first member.

20           11.     A fishing reel, comprising:

          a reel unit having a master gear shaft;

          a spool shaft rotatively fitted in a central portion of said reel unit;

          a spool carried rotatively yet axially immovably on said spool shaft;

          a handle disposed sideways on said reel unit;

25           a first member having a spindle-formed portion coupled to one of said spool shaft and said master gear shaft of said fishing reel;

          a second member having an inner peripheral surface disposed about an outer peripheral surface of said spindle-formed portion of said first member, said second member being rotatable relative to said first member; and

30           a seal member for sealing a clearance between said spindle-formed portion of first member and said second member, and having

a cylindrical portion made of an elastic substance and mountable on  
said spindle-formed portion of said first member, and  
a sealing portion formed integrally on an outer circumferential surface  
of said cylindrical portion and tapering toward said inner  
5 peripheral surface of said second member such that a distal  
edge of said sealing portion can contact said second member.

12. The fishing reel set forth in claim 11, wherein  
said spindle-formed portion of said first member has an annular groove  
10 formed in said outer circumferential surface opposing said second member, and  
said cylindrical portion is fitted into said annular groove.

13. The fishing reel set forth in claim 11, wherein  
said sealing portion includes a lip portion that contacts said second member,  
15 said lip portion extending outward from and being inclined relative to said spindle-  
formed portion of said first member.

14. The fishing reel set forth in claim 11, wherein:  
said fishing reel is a lever-drag type dual-bearing reel having a lever-drag  
20 mechanism,  
said first member is a stationary component of said lever-drag mechanism,  
said stationary component being immovable in an axial direction of said spool; and  
said second member is a movable component of the lever-drag mechanism,  
said movable component being rotatable relative to said first member and shiftable in  
25 the axial direction of said spool.

15. The fishing reel set forth in claim 14, wherein:  
said first member is a drag disk capable of braking said spool, and rotates  
linked to said spool shaft passing through a center of said spool; and  
30 said second member is a cover member for covering said drag disk, and rotates  
linked to said spool and meanwhile shifts in the axial direction of said spool together  
with said spool and said spool shaft.

16. The fishing reel set forth in claim 15, wherein:  
said drag disk has a boss portion passing centrally through said cover member;  
said seal member is fitted to said boss portion; and  
5 said cover member has a contact face and a relief face formed on said inner  
peripheral surface of said cover member, said contact face and said relief face being  
arranged next to each other in the axial direction of said spool, said seal member  
being able to contact said contact face but not being able to contact said relief face.

10 17. The fishing reel set forth in claim 16, wherein  
said sealing portion of said sealing member parts away from said contact face  
of said cover member and opposes said relief face when said drag disk in its brake-  
release state parts away from said spool; and comes into contact with said contact face  
when said drag disk in its braking state contacts said spool.

15 18. The fishing reel set forth in claim 14, wherein:  
said spool has a bobbin-trunk portion and flange portions arranged on either  
end of said bobbin-trunk portion; and  
a size of said sealing portion in outer diameter is 8% or more and 50% or less  
20 of an outer diameter of said flange portions.

19. The fishing reel set forth in claim 11, wherein:  
said first member is a handle spindle fitted detachably and reattachably to said  
master-gear shaft; and  
25 said second member is a reel body in said reel unit rotatively carrying said  
master-gear shaft.